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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/727,898	12/01/2000	Thomas William Birdwell	13DV13419	3672
6111	7590	06/08/2006	EXAMINER	
GENERAL ELECTRIC COMPANY			LU, KUEN S	
ANDREW C HESS			ART UNIT	
GE AIRCRAFT ENGINES			PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/727,898	Applicant(s) BIRDWELL ET AL.	
	Examiner Kuen S. Lu	Art Unit 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 12 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendments

1. The Action is responsive to the Applicant's Amendments, filed on April 12, 2006.
2. Concerning the Applicant's Remarks on claim rejections, dated January 12, 2006, has been fully considered by the Examiner. Please see discussion in the section ***Response to Arguments***, following the Action for non-Final Rejection, as shown next.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura (U.S. Application 2002/0013857) in view of Lemelson et al. (U.S. Patent 5,946,220).

As per claim 1, Kitamura teaches the following for managing data:

“providing a predetermined standard data format” for data (See Page 1, [0004] where supplied image data to a computer capture board is converted to a predetermined data

format is equivalent to Applicant's providing a predetermined standard data format for data);

Kitamura does not teach the predetermined standard data format is specifically for NDE test data.

However, Lemelson teaches non-destructive testing apparatus and method (See col. 11, lines 56-67).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Lemelson with Kitamura reference because both references are dedicated to image data analysis and data conversion, and the combined teaching would have allowed Kitamura's system to utilize Lemelson's teaching on providing mixed apparatus capable of adapting to different process conditions in order to satisfy the ever increasing demand for capturing and processing various images.

The combined teaching of the Lemelson and Kitamura references further teaches the following:

"converting existing NDE test data including a plurality of different formats into the standard data format, wherein the plurality of different data formats comprise image data and non-image data" (See Kitamura: Page 1, [0004] where supplied image data to a computer capture board is converted to a predetermined data format, and Lemelson: col. 11, lines 56-67, col. 15, lines 37-40 and col. 16, lines 8-25 where apparatus and method for non-destructive testing is implemented, and further, image and non-image data are converted);

“adding the converted NDE test data to a computer database associated with a computer network” (See Lemelson: col. 16, lines 43-65 where feature vectors are generated from image and non-image data and stored in fact database, and Kitamura: Page 1, [0004] where captured image data is temporary stored in the internal storage device and can be transmitted to other computer through the network is equivalent to Applicant’s adding the converted NDE test data to a computer database associated with a computer network); and

“transmitting the converted data over the network” (See Kitamura: Page 1, [0004] where supplied image data to a computer capture board is converted to a predetermined data format for transmitting over network).

5. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura (U.S. Application 2002/0013857) in view of Lemelson et al. (U.S. Patent 5,946,220) as applied to claim 1 above, and further in view of Hosack et al. (U.S. Patent 6,511,426, hereafter “Hossack”).

As per claim 2, the combined teaching of Lemelson and Kitamura references does not explicitly teach “the plurality of different data formats comprise at least one of a TVF format, an ASCII format, and an VDE format”.

However, Hossack teaches “the plurality of different data formats comprise at least one of a TVF format, an ASCII format, and an VDE format” (See Hossack: col. 9, lines 15-30 wherein Hossack’s TIFF format is introduced to display video image data frames

is equivalent to Applicant's the plurality of different data formats comprise at least one of a TVF format, an ASCII format, and an VDE format).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Hossack with the Lemelson and Kitamura references because the references are dedicated to non-destructive testing, testing process, testing data conversion, and testing data collection and display, the combined teaching of the references would have enabled a non-destructive testing system capable of achieving required accuracy.

As per claim 3, Hossack further teaches "the standard data format is based at least in part on a Digital Image Communication in Medicine (DICOM) format" (See col. 9, lines 15-30 wherein Hossack's video image data frames are exported into DICOM format is equivalent to Applicant's the standard data format is based at least in part on a Digital Image Communication in Medicine, DICOM format).

As per claim 4, the combined teaching of Hossack, Lemelson and Kitamura references further teaches "the converted NDE test data to a computer database comprises storing images on the computer database" (See Kitamura: Page 1, [0004] where captured image data is temporary stored in the internal storage device, and Lemelson: col. 11, lines 56-67 where non-destructive testing apparatus and method is implemented, and Hossack: Fig. 1 and col. 15, lines 40-45 wherein device is provided

to store images, is equivalent to Applicant's the converted NDE test data to a computer database comprises storing images on the computer database).

As per claim 5, Hossack further teaches "transmitting the converted data over the network comprises transmitting images over the network" (See Fig. 17, col. 41, lines 26-30 and col. 42, lines 9-18 wherein Hossack's teaching on DICOM standard for storing and transmitting images on network is equivalent to Applicant's transmitting the converted data over the network comprises transmitting images over the network).

6. Claim 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura (U.S. Application 2002/0013857) in view of Lemelson et al. (U.S. Patent 5,946,220) as applied to claim 1 above, and further in view of Norris et al. (U.S. Patent 5,920,828, hereafter "Norris").

As per claim 6, the combined teaching of Lemelson and Kitamura references teaches steps of managing NDE test data as previously described in claim 1 rejection.

The combined teaching does not specifically teach "locating the converted NDE test data on the first computer database using a cataloging server", although Kitamura teaches storing captured image data in the internal storage device at Page 1, [0004].

However, Norris teaches using a central database and tape catalog server to gather, process and locate seismic test data in Fig. 1 and col. 10, lines 14-17.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Norris with the Lemelson and Kitamura references because the references are dedicated to non-destructive testing, testing process, testing data conversion, and testing data collection and display, and further combined teaching would have equipped the system with a central relational database and cataloger for maintaining integrity and enhancing processing capabilities.

As per claim 7, the combined teaching of Norris, Lemelson and Kitamura references further teaches "locating the converted NDE test data comprises locating an image" (See Kitamura: Page 1, [0004] where captured image data is temporary stored in the internal storage device, and Norris: col. 10, lines 22-25 wherein Norris' seismic data files are indexed and cataloged and located is equivalent to the Applicant's locating the converted NDE test data comprises locating an image).

7. The prior art made of record

H. U.S. Patent 5,946,220

E. U.S. Patent 6,511,426

F. U.S. Patent 5,920,828

G. U.S. Application 2002/0013857

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. U.S. Patent 6,721,676

B. U.S. Patent 5,628,319

C. U.S. Patent 6,499,125

D. U.S. Patent 6,018,713

Response to Arguments

8. Applicant's arguments with respect to claims 1-7, filed April 12, 2006, have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S Lu whose telephone number is (571) 272-4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John Cottingham, can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Page 13 published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

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Art Unit: 2167

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Kuen S. Lu

Patent Examiner

June 6, 2006

A handwritten signature in black ink, appearing to read 'K. Lu', with a long horizontal flourish extending to the right. The signature is written over a faint, illegible stamp.